

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Oxy USA WTP LP

AUTHORIZING THE OPERATION OF

Willard CO₂ Separation Plant
Crude Petroleum and Natural Gas

LOCATED AT

Yoakum County, Texas

Latitude 33° 1' 40" Longitude 102° 49' 11"

Regulated Entity Number: RN102533445

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O549 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
- (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
- (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
- B. Title 40 CFR § 60.8 (relating to Performance Tests)
- C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
- D. Title 40 CFR § 60.12 (relating to Circumvention)
- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
- F. Title 40 CFR § 60.14 (relating to Modification)
- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

6. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

New Source Review Authorization Requirements

7. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
8. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
9. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

10. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
11. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116

- (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

- 12. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

- 13. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

14. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E-EMGEN	SRIC ENGINES	N/A	63ZZZZ-6590c	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
E-EMWATER	SRIC ENGINES	N/A	40CFR60-III	40 CFR Part 60, Subpart III	No changing attributes.
E-EMWATER	SRIC ENGINES	N/A	63ZZZZ-6603a	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FU-CO ₂	FUGITIVE EMISSION UNITS	N/A	40CFR60-KKK	40 CFR Part 60, Subpart KKK	No changing attributes.
FU-DEMETH	FUGITIVE EMISSION UNITS	N/A	40CFR60-KKK	40 CFR Part 60, Subpart KKK	No changing attributes.
FU-OTHER	FUGITIVE EMISSION UNITS	N/A	40CFR60-KKK	40 CFR Part 60, Subpart KKK	No changing attributes.
FU-OTHER	FUGITIVE EMISSION UNITS	N/A	40CFR60-OOOO	40 CFR Part 60, Subpart OOOO	No changing attributes.
GROUP-2	STORAGE TANKS/VESSELS	T-931, T-932	40CFR60-Kb	40 CFR Part 60, Subpart Kb	No changing attributes.
PRO-SRU	GAS SWEETENING/SULFU R RECOVERY UNITS	N/A	30TAC112	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
W-07	FLARES	N/A	30TAC111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
W-07	FLARES	N/A	40CFR60-18	40 CFR Part 60, Subpart A	No changing attributes.
W-09	BOILERS/STEAM GENERATORS/STEAM	N/A	40CFR60-DC	40 CFR Part 60, Subpart Dc	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	GENERATING UNITS				

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-EMGEN	EU	63ZZZZ-6590c	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6604(b) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(a)-Table7.4 § 63.6650(f) [G]§ 63.6650(h)
E-EMWATER	EU	40CFR60-III	CO	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4-fn2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 75 KW but less than 130 KW and a displacement of less than 30 liters per cylinder and is a 2010-2012 model year and has a rated speed of greater than 2650 RPMs may comply with the emission limitations for the 2009 model year. In that event, the owners and operators must comply with a CO emission limit of 5.0 g/KW-hr as listed in Table 4 (Footnote 2) to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
E-EMWATER	EU	40CFR60-III	NMHC and NO _x	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4-fn2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 75 KW but less than 130 KW	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(f) § 60.4218	and a displacement of less than 30 liters per cylinder and is a 2010-2012 model year and has a rated speed of greater than 2650 RPMs may comply with the emission limitations for the 2009 model year. In that event, the owners and operators must comply with an NMHC+NOx emission limit of 10.5 g/KW-hr as listed in Table 4 (Footnote 2) to this subpart.			
E-EMWATER	EU	40CFR60-III	PM	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4-fn2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 75 KW but less than 130 KW and a displacement of less than 30 liters per cylinder and is a 2010-2012 model year and has a rated speed of greater than 2650 RPMs may comply with the emission limitations for the 2009 model year. In that event, the owners and operators must comply with a PM emission limit of 0.80 g/KW-hr as listed in Table 4 (Footnote 2) to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
E-EMWATER	EU	63ZZZZ-6603a	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1)	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(f)	Use this provision instead of §60.485(d)(1). Each component is presumed to be in VOC service or in wet gas service unless it is not. For a component to be considered not in VOC service, it must be determined that the % VOC content can never be expected to exceed 10.0 % by wt. For a component to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. To determine VOC content use the procedures in §60.63.	§ 60.632(f)	§ 60.632(f)	None
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c)	Comply with the requirements for compressors as stated in §60.482-3 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k)		§ 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(d) § 60.486(k)	Equipment in vacuum service to comply with §60.482-1(a), (b), and (d) and §60.482-2 to §60.482-10, except as provided in §60.633 or §60.482-1(d).	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e)	Comply with the requirements for pumps in light liquid service as stated in §60.482-2 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)				
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) [G]§ 60.633(b)(3)	Comply with the requirements for pressure relief devices in gas/vapor service as stated in §60.482-4 and 60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) § 60.633(b)(1) § 60.633(b)(2) [G]§ 60.633(b)(3) [G]§ 60.633(b)(4)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) [G]§ 60.633(b)(4) [G]§ 60.635(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for open-ended valves or lines as stated in §60.482-6 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a)	Comply with the requirements for pumps in	§ 60.482-8(a)(1) § 60.485(a)	[G]§ 60.486(a) [G]§ 60.486(b)	§ 60.487(a) [G]§ 60.487(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	heavy liquid service as stated in §60.482-8, except as provided in §60.633.	[G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in light liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-	VOC	40 CFR Part 60,	§ 60.632(a)	Comply with the	§ 60.482-8(a)(1)	[G]§ 60.486(a)	§ 60.487(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		KKK		Subpart KKK	§ 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	requirements for connectors as stated in §60.482-8, except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for valves in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-10(d) § 60.482-10(m) § 60.486(k) § 60.633(g)	Comply with the requirements for closed vent systems and control devices - flares - as stated in §60.482-10(d) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) [G]§ 60.485(g) § 60.632(d)	[G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a)	Comply with the requirements for closed	§ 60.485(a) [G]§ 60.485(b)	[G]§ 60.482-10(l) [G]§ 60.486(a)	§ 60.487(a) [G]§ 60.487(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(b) [G]§ 60.482-10(f) [G]§ 60.482-10(g) § 60.482-10(h) § 60.482-10(i) [G]§ 60.482-10(j) [G]§ 60.482-10(k) § 60.482-10(m) § 60.486(k)	vent systems and control devices - closed vent systems - as stated in §60.482-10(g) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(c) § 60.487(e)
FU-CO2	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2) § 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)	An owner or operator may elect to comply with the requirements of §60.483-1 and §60.483-2.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(f)	Use this provision instead of §60.485(d)(1). Each component is presumed to be in VOC service or in wet gas service unless it is not. For a component to be considered not in VOC service, it must be determined that the % VOC content can never be	§ 60.632(f)	§ 60.632(f)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						expected to exceed 10.0 % by wt. For a component to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. To determine VOC content use the procedures in §60.63.			
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(d) § 60.486(k)	Equipment in vacuum service to comply with §60.482-1(a), (b), and (d) and §60.482-2 to §60.482-10, except as provided in §60.633 or §60.482-1(d).	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g)	Comply with the requirements for pumps in light liquid service as stated in §60.482-2 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)				
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) [G]§ 60.633(b)(3)	Comply with the requirements for pressure relief devices in gas/vapor service as stated in §60.482-4 and 60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) § 60.633(b)(1) § 60.633(b)(2) [G]§ 60.633(b)(3) [G]§ 60.633(b)(4)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) [G]§ 60.633(b)(4) [G]§ 60.635(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for open-ended valves or lines as stated in §60.482-6 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a)	Comply with the requirements for pumps in heavy liquid service as stated in §60.482-8, except	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	as provided in §60.633.	§ 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.486(e)(1) § 60.486(j)	[G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in light liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for connectors as stated in §60.482-8,	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	except as provided in §60.633.	§ 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for valves in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-10(d) § 60.482-10(m) § 60.486(k) § 60.633(g)	Comply with the requirements for closed vent systems and control devices - flares - as stated in §60.482-10(d) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) [G]§ 60.485(g) § 60.632(d)	[G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-10(f)	Comply with the requirements for closed vent systems and control devices - closed vent	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3)	[G]§ 60.482-10(l) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.482-10(g) § 60.482-10(h) § 60.482-10(i) [G]§ 60.482-10(j) [G]§ 60.482-10(k) § 60.482-10(m) § 60.486(k)	systems - as stated in §60.482-10(g) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(f) § 60.632(d)	§ 60.486(e)(1) § 60.486(j)	
FU-DEMETH	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2) § 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)	An owner or operator may elect to comply with the requirements of §60.483-1 and §60.483-2.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(f)	Use this provision instead of §60.485(d)(1). Each component is presumed to be in VOC service or in wet gas service unless it is not. For a component to be considered not in VOC service, it must be determined that the % VOC content can never be expected to exceed 10.0 % by wt. For a component to	§ 60.632(f)	§ 60.632(f)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. To determine VOC content use the procedures in §60.63.			
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.633(f)	Reciprocating compressors in wet gas service are exempt from the compressor control requirements of §60.482-3.	None	§ 60.486(j) § 60.635(c)	None
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for compressors as stated in §60.482-3 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(d) § 60.486(k)	Equipment in vacuum service to comply with §60.482-1(a), (b), and (d) and §60.482-2 to §60.482-10, except as provided in §60.633 or §60.482-1(d).	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	Comply with the requirements for pumps in light liquid service as stated in §60.482-2 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in gas/vapor service as stated in §60.482-4 and 60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) § 60.633(b)(1) § 60.633(b)(2) [G]§ 60.633(b)(3)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) [G]§ 60.633(b)(4) [G]§ 60.635(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.633(b)(3)		[G]§ 60.633(b)(4)		
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for open-ended valves or lines as stated in §60.482-6 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	Comply with the requirements for pumps in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	Comply with the requirements for pressure relief devices in light liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)		§ 60.632(d) [G]§ 60.633(h)		
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for connectors as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for valves in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)		[G]§ 60.633(h)		
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-10(d) § 60.482-10(m) § 60.486(k) § 60.633(g)	Comply with the requirements for closed vent systems and control devices - flares - as stated in §60.482-10(d) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) [G]§ 60.485(g) § 60.632(d)	[G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-10(b) § 60.482-10(m) § 60.486(k)	Comply with the requirements for closed vent systems and control devices - vapor recovery systems - as stated in §60.482-10(b) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-10(f) [G]§ 60.482-10(g) § 60.482-10(h) § 60.482-10(i) [G]§ 60.482-10(j) [G]§ 60.482-10(k) § 60.482-10(m) § 60.486(k)	Comply with the requirements for closed vent systems and control devices - closed vent systems - as stated in §60.482-10(g) and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	[G]§ 60.482-10(l) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FU-OTHER	EU	40CFR60-KKK	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2) § 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)	An owner or operator may elect to comply with the requirements of §60.483-1 and §60.483-2.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)
FU-OTHER	EU	40CFR60-O000	VOC	40 CFR Part 60, Subpart O000	§ 60.5365 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart O000	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart O000	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart O000	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart O000	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart O000
GROUP-2	EU	40CFR60-Kb	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(b)(1) § 60.18	Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3).	§ 60.113b(d) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See CAM Summary	§ 60.115b § 60.115b(d)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b § 60.115b(d)(1) § 60.115b(d)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRO-SRU	EU	30TAC112	SO ₂	30 TAC Chapter 112, Sulfur Compounds	§ 112.7(a)	No person may cause, suffer, allow, or permit emissions of SO ₂ to exceed the emission limits specified for stack effluent flow rates < 4,000 scfm as determined by the specified equation.	§ 112.2(a) ** See CAM Summary	§ 112.2(c)	§ 112.2(b)
W-07	EU	30TAC111	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
W-07	CD	40CFR60-18	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
W-09	EU	40CFR60-DC	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
W-09	EU	40CFR60-DC	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
W-09	EU	40CFR60-DC	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Additional Monitoring Requirements	
Compliance Assurance Monitoring Summary	36

CAM Summary

Unit/Group/Process Information	
ID No.: GROUP-2	
Control Device ID No.: W-07	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 40CFR60-Kb
Pollutant: VOC	Main Standard: § 60.112b(b)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: Presence of a flare pilot flame shall be monitored and an absence of a pilot flame shall be considered and reported as a deviation.	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: PRO-SRU	
Control Device ID No.: W-06	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 30TAC112
Pollutant: SO ₂	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO ₂ Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: It is a deviation if SO ₂ mass emission rate is greater than 132.5 lb/hr.	
CAM Text: Use a continuous emission monitoring system (CEMS) to measure and record the mass emissions rate of sulfur dioxide expressed in pounds per hour in the exhaust stream of the control device. The CEMS shall be operated in accordance with the monitoring requirements of 40 CFR § 60.13 and the Performance Specifications of 40 CFR Part 60, Appendix B.	

CAM Summary

Unit/Group/Process Information	
ID No.: PRO-SRU	
Control Device ID No.: W-06	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 30TAC112
Pollutant: SO ₂	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Exhaust gas temperature	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: It is a deviation if the exhaust gas temperature is less than 955 F.	
<p>CAM Text: The temperature sensor is properly located downstream of the combustion chamber and data acquisition is computerized.</p> <p>The temperature sensor is located downstream of the incinerator chamber and will provide data to ensure proper combustion of H₂S and VOC.</p> <p>The device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <p>+/- 2% of reading or +/- 2.5 degree Celsius</p>	

Permit Shield

Permit Shield40

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GLYREBOIL2	N/A	40 CFR Part 60, Subpart Dc	The reboiler unit is rated below 2.9 MW (10 MMBtu/h).
T-840	N/A	40 CFR Part 60, Subpart Kb	Capacity of storage vessel is less than 75 cubic meters (m3).
W-03	N/A	40 CFR Part 60, Subpart Dc	Construction of unit commenced prior to June 9, 1989 and unit has not be modified or reconstructed since then.
W-04	N/A	40 CFR Part 60, Subpart Dc	Construction of unit commenced prior to June 9, 1989 and unit has not be modified or reconstructed since then.

New Source Review Authorization References

New Source Review Authorization References 42

New Source Review Authorization References by Emission Unit..... 43

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX683	Issuance Date: 08/30/2011
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 9649	Issuance Date: 08/30/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.352	Version No./Date: 09/04/2000
Number: 106.359	Version No./Date: 09/10/2013
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E-EMGEN	EMERGENCY GENERATOR	106.511/09/04/2000
E-EMWATER	EMERGENCY FIREPUMP	106.511/09/04/2000
FU-CO2	CO2 PLANT FUGITIVES	9649, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX683
FU-DEMETH	FUGITIVE EMISSIONS ASSOCIATED WITH DEMETHANIZER	106.352/09/04/2000
FU-OTHER	FUGITIVE EMISSIONS ASSOC. WITH MEMBRANE PROJECT	9649, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX683
GLYREBOIL2	GLYCOL DEHYDRATOR	106.261/11/01/2003, 106.262/11/01/2003
PRO-SRU	PRO-SRU	9649, PSDTX683
T-840	WATER/HYDROCARBON TANK	9649, PSDTX683
T-931	WATER/HYDROCARBON TANK	106.352/09/04/2000
T-932	WATER/HYDROCARBON TANK	106.352/09/04/2000
W-03	BOILER #1 (H-320A)	9649, PSDTX683
W-04	BOILER #2(H-320B)	9649, PSDTX683
W-07	EMERGENCY FLARE (H-150)	9649, PSDTX683
W-09	BOILER 3	9649, PSDTX683

Appendix A

Acronym List	45
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Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
ELP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table..... 47

Major NSR Summary Table

Permit Number: 9649 and PSDTX683			Issuance Date: August 30, 2011				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
W-01	CO2 Heater	NOx	0.25	1.07	9		
W-01	CO2 Heater	CO	0.21	0.90	9		
W-01	CO2 Heater	SO2	0.10	0.10	9		
W-01	CO2 Heater	PM10	0.10	0.10	9		
W-01	CO2 Heater	VOC	0.10	0.10	9		
W-02	Glycol Reboiler	NOx	0.20	0.90	9	22	
W-02	Glycol Reboiler	CO	0.20	0.72	9	22	
W-02	Glycol Reboiler	SO2	0.10	0.10	9	22	
W-02	Glycol Reboiler	PM10	0.10	0.10	9	22	
W-02	Glycol Reboiler	VOC	0.10	0.10	9	22	
W-03	Boiler 1	NOx	3.84	16.80	9	22	
W-03	Boiler 1	CO	4.51	19.80	9	22	
W-03	Boiler 1	SO2	0.05	0.20	9	22	
W-03	Boiler 1	PM10	0.41	1.80	9	22	
W-03	Boiler 1	VOC	0.30	1.30	9	22	
W-04	Boiler 2	NOx	3.84	16.80	9	22	
W-04	Boiler 2	CO	4.51	19.80	9	22	
W-04	Boiler 2	SO2	0.05	0.20	9	22	
W-04	Boiler 2	PM10	0.41	1.80	9	22	
W-04	Boiler 2	VOC	0.30	1.30	9	22	
W-05	SRU Heater	NOx	0.11	0.50	9	22	
W-05	SRU Heater	CO	0.10	0.40	9	22	
W-05	SRU Heater	SO2	0.10	0.10	9	22	
W-05	SRU Heater	PM10	0.10	0.10	9	22	
W-05	SRU Heater	VOC	0.10	0.10	9	22	

Permit Number: 9649 and PSDTX683			Issuance Date: August 30, 2011				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
W-06	SRU Incinerator	NOx	0.30	1.00	9	22	
W-06	SRU Incinerator	CO	0.20	0.90	9	22	
W-06	SRU Incinerator	SO2	132.50	126.44	9, 15, 17, 18	10, 15, 17, 18, 22	17, 18
W-06	SRU Incinerator	PM10	0.10	0.10	9	22	
W-06	SRU Incinerator	VOC	0.10	0.10	9, 16	22, 16	
W-06	SRU Incinerator	H2S	1.41	3.30	9, 15, 16, 19	10, 15, 16, 22	
W-07	Flare	NOx	0.10	0.33			
W-07	Flare	CO	0.33	1.42			
W-07	Flare	SO2	3.04	5.87			
W-07	Flare	VOC	0.20	0.70	6	6	
W-07	Flare	H2S	0.10	0.10			
W-08	Flare (5)	NOx	0.10	0.41			
W-08	Flare (5)	CO	0.35	1.55			
W-08	Flare (5)	SO2	0.01	0.04			
W-08	Flare (5)	VOC	0.01	0.02	6	6	
W-09	Boiler 3	NOx	2.88	12.60	9, 18	18, 22	18
W-09	Boiler 3	CO	3.04	13.32	9, 18	18, 22	18
W-09	Boiler 3	SO2	0.10	0.40	9	22	
W-09	Boiler 3	PM10	0.61	2.70	9	22	
W-09	Boiler 3	VOC	0.44	1.94	9	22	
W-10	Temporary Boiler (6)	NOx	0.74	3.26	9	22	
W-10	Temporary Boiler (6)	CO	2.75	12.06	9	22	
W-10	Temporary Boiler (6)	SO2	0.07	0.30	9	22	
W-10	Temporary Boiler (6)	PM10	0.60	2.43	9	22	
W-10	Temporary Boiler (6)	VOC	0.40	1.80	9	22	
Analyzers	Analyzer Vents	VOC	0.10	0.22			
Analyzers	Analyzer Vents	H2S	0.10	0.10			
FU-CO2	Plant Fugitives (7)	VOC	5.77	25.25	4, 12, 13	4, 12, 13	4
FU-CO2	Plant Fugitives (7)	H2S	0.26	1.11	4, 14	4, 14	4

Permit Number: 9649 and PSDTX683				Issuance Date: August 30, 2011			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
FU-OTHER	Plant Fugitives-Other (7)	VOC	1.50	6.60	4, 12	4, 12	4
FU-OTHER	Plant Fugitives-Other (7)	H2S	0.11	0.48	4, 14	4, 14	4
FU-DEMETH	Fug. Emissions from Demethanizer (4)(7)	VOC	0.14	0.60	4, 12	4, 12	4
FU-DEMETH	Fug. Emissions from Demethanizer (4)(7)	H2S	0.10	0.10	4, 14	4, 14	4
E-EMGEN	Emerg. Generator (4)	NOx	19.91	8.71			
E-EMGEN	Emerg. Generator (4)	CO	4.34	1.90			
E-EMGEN	Emerg. Generator (4)	SO2	1.70	0.74			
E-EMGEN	Emerg. Generator (4)	PM10	1.81	0.80			
E-EMGEN	Emerg. Generator (4)	VOC	0.60	0.30			
E-EMWATER	Fire Water Pump (4)	NOx	4.23	1.85			
E-EMWATER	Fire Water Pump (4)	CO	0.92	0.40			
E-EMWATER	Fire Water Pump (4)	SO2	0.30	0.12			
E-EMWATER	Fire Water Pump (4)	PM10	0.30	0.13			
E-EMWATER	Fire Water Pump (4)	VOC	0.34	0.15			
H-220	Demethan. Heater (4)	NOx	0.30	1.12	9	22	
H-220	Demethan. Heater (4)	CO	0.21	0.94	9	22	
H-220	Demethan. Heater (4)	SO2	0.10	0.10	9	22	
H-220	Demethan. Heater (4)	PM10	0.10	0.10	9	22	
H-220	Demethan. Heater (4)	VOC	0.10	0.10	9	22	
T-230A	Methanol Storage Tank	VOC	2.22	0.21			
T-230B	Methanol Storage Tank	VOC	2.22	0.21			

Permit Number: 9649 and PSDTX683			Issuance Date: August 30, 2011				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
V-892	Diesel Storage Tank 1	VOC	0.10	0.10			
T-EMGEN	Diesel Storage Tank 2	VOC	0.10	0.10			
SU-1	Sulfur Loading	H2S	0.01	0.01	21	21	

Footnotes: (1) Emission Point Identification – either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

(3) CO – carbon monoxide, H2S – hydrogen sulfide, NOx – total oxides of nitrogen, PM10 – particulate matter, suspended in the atmosphere including PM10, SO2 – sulfur dioxide, VOC – volatile organic compounds as defined in 30 TAC 101.1

(4) These facilities are authorized by Permit by Rule and are included for reference. (11/06)

(5) Emissions authorized by this flare are pilot and purge gas only.

(6) A temporary boiler with a heat input rating of up to 74.4 MM Btu/hr may be used on an as-needed basis. (11/06)

(7) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

(8) HAP emissions do not exceed 10 tpy of any one and 25 tpy of any combination of HAPs.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule: 24 hr/day, 7 day/week, 8760 hr/yr.

** Compliance with annual emission limits is based on a rolling 12-month period.

OTEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO
Oxy USA WTP LP
AUTHORIZING THE CONTINUED OPERATION OF
Willard CO₂ Separation Plant
LOCATED AT Denver City, Yoakum County, Texas
LATITUDE 33° 1' 40" LONGITUDE 102° 49' 11"

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Chief Engineer's Office the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 9649

Date: August 30, 2011

A handwritten signature in black ink, appearing to read "Mark V. Wiley".

For the Commission

SPECIAL CONDITIONS

Permit Numbers 9649 and PSD-TX-683

EMISSION STANDARDS

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the special conditions. **(1/06)**

THROUGHPUT AND PRODUCT SPECIFICATIONS

2. This permit authorizes processing a maximum of 95 MM standard cubic feet per day (scfd) of gas upon completion of the tail gas clean up project in Special Condition No. 10.B. The total sulfur recovered from the Sulfur Recovery Units (SRUs) shall not exceed 9.4 long tons per day (LTPD). **(9/08)**
3. The permitted tanks are subject to the restrictions below unless a change in operation is approved by the Texas Commission on Environmental Quality (TCEQ) Executive Director or obtained through permit by rule. **(11/06)**

<u>Tank</u>	<u>Liquid Stored</u>	<u>Fill Rate (gph**)</u>	<u>Turnovers per year</u>
T-840	slop oil	105	75
T-931	water/hydrocarbon	4,375	439
T-932	water/hydrocarbon	4,375	439
T-230A	methanol	1,000*	1,184
T-230B	methanol	1,000*	1,184
V-892	diesel fuel	500*	9
9T-EMGEN	diesel fuel	500	9

* tank is filled a maximum of once an hour

** gallons per hour

FEDERAL PROGRAM APPLICABILITY

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated for Equipment Leaks of Volatile Organic Compounds (VOC) from

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Onshore Natural Gas Processing Plants, and for Onshore Natural Gas Processing in Title 40 Code of Federal Regulations (40 CFR) Part 60, Subparts A, KKK, and LLL.

EMISSION CONTROLS

5. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than one percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than one weight percent are not consistent with good practice for minimizing emissions, with the exception of those listed below: discharges from the pressure settings valves from the fifth stage discharge of the CO₂ injection compressors and the CO₂ injection system piping. **(1/06)**

6. Flares shall be designed and operated in accordance with the following requirements: **(11/06)**

- A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the Title 40 Code of Federal Regulations Part 60.18 (40 CFR § 60.18) specifications of minimum heating value and maximum tip velocity under normal and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of CO₂ assist to the flare.

7. NO_x and CO emissions from Boiler EPN W-09 shall not exceed the following: **(11/06)**

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0.035 lb NO_x/MMBtu on an hourly average
50 ppmvd CO corrected to 3 percent oxygen on an hourly basis

8. NO_x and CO emissions from Boiler EPN W-10 shall not exceed the following: **(11/06)**

0.01 lb NO_x/MMBtu on an hourly average
50 ppmvd CO corrected to 3 percent oxygen on an hourly basis

9. The fuel gas shall be sampled every 6 months to determine the total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement. **(11/06)**
10. The minimum sulfur recovery efficiency for the sulfur recovery unit (SRU) shall meet the specifications listed in part A of this condition until September 1, 2008. After such time, the minimum sulfur recovery efficiency for the sulfur recovery unit (SRU) shall meet the specifications listed in part B of this condition. **(9/08)**

- A. The minimum sulfur recovery efficiency for the sulfur recovery units (SRUs) shall meet the specifications below:

ivalent Sulfur Input to SRU long tons per day	Minimum Monthly Recovery Efficiency, %
0 to 1.8	90.0
1.8 to 2.7	93.0
2.7 to 7.1	95.0

The sulfur recovery efficiency shall be determined by one of the two calculation methods shown below:

$$(a) \quad \text{Efficiency} = \frac{100 * (S \text{ recovered})}{(S \text{ recovered}) + (S \text{ stack})}$$

$$(b) \quad \text{Efficiency} = \frac{(S \text{ recovered}) * (100)}{(S \text{ acid gas})}$$

Where: Efficiency = sulfur recovery efficiency, percent

S recovered = liquid sulfur production, lbs/day

S acid gas = sulfur in acid gas stream, lbs/day

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S stack = sulfur in incinerator stack, lbs/day

Method (a) shall be used if there is a continuous emission monitoring system in place that meets the requirements of Special Condition No. 16. The acid gas stream sulfur concentration shall be measured using the technique described in Special Condition No. 15. If the continuous H₂S monitor is not available, tutweiler (or equivalent) sulfur sampling results shall be used to determine the concentration. The efficiency may be calculated on a monthly average basis. The efficiency shall be recorded and updated monthly.

The efficiency calculation shall include all periods of normal unit operations. Upset periods caused by the loss of electricity or upsets in major components that impact SRU operation may be excluded from the calculation if the upset is reported to the TCEQ Regional Office in accordance with Title 30 Texas Administrative Code § 101.6 (30 TAC § 101.6).

- B. After September 1, 2008, the minimum sulfur recovery efficiency for the sulfur recovery units (SRUs) shall meet the specifications below:.

Equivalent Sulfur Input to SRU long tons per day	Minimum Daily Recovery Efficiency, %	Minimum Monthly Recovery Efficiency, %
0 to 1.8	85.0	90.0
1.8 to 2.7	85.0	93.0
2.7 to 10	85.0	96.0

The sulfur recovery efficiency shall be determined by one of the two calculation methods shown below:

$$(a) \quad \text{Efficiency} = \frac{100 * (\text{S recovered})}{(\text{S recovered}) + (\text{S stack})}$$

Or when the CEMS is not operational:

$$(b) \quad \text{Efficiency} = \frac{(\text{S recovered}) * (100)}{(\text{S acid gas})}$$

Where: Efficiency = sulfur recovery efficiency, percent

S recovered = liquid sulfur production, lbs/day

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S acid gas = sulfur in acid gas stream, lbs/day

S stack = sulfur in incinerator stack, lbs/day.

Method (a) shall be used if there is a continuous emission monitoring system in place that meets the requirements of Special Condition No. 16. The acid gas stream sulfur concentration shall be measured using the technique described in Special Condition No. 15. If the continuous H₂S monitor is not available, tutweiler (or equivalent) sulfur sampling results shall be used to determine the concentration. The efficiency may be calculated on a monthly average basis. The efficiency shall be recorded and updated monthly.

The sulfur recovery efficiency shall be demonstrated for each calendar day (24-hour period) and each calendar month by a mass balance calculation using data obtained from the incinerator stack sulfur dioxide monitor and sulfur production records. Records and copies of the compliance calculations shall be maintained. **(11/06)**

11. Vents from Fixed-Roof Tanks, T-931, T-932, and T-840, shall be routed to the flare.
12. Piping, Valves, Flanges, Pumps, and Compressors in VOC Service - 28M
 - A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.5 pound per square inch, absolute (psia) at 100° F or at maximum process operating temperature if less than 100° F, or (2) to piping and valves two inches nominal size and smaller, or (3) where the operating pressure is at least 5 kilopascals (0.725 pound per square inch [psi]) below ambient pressure or (4) areas of the plant monitored under Special Condition No. 15.
 - B. Construction of new and reworked piping, valves, and pump and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
 - C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.
 - D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking

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during plant operation. Non-accessible valves shall be identified in a list to be made available upon request.

- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring period after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

- G. Except as may be provided for in the special conditions of this permit, all pump and compressor seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. Seal systems that prevent emissions may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure or seals degassing to vent control systems kept in good working order.

Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

- H. Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 10,000 ppmv or found by visual inspection to be leaking (e.g., dripping liquids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component as specified in this paragraph within 15 days after the leak is found. If the repair of a component would require a unit

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shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The TCEQ Executive Director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

- I. The results of the required fugitive monitoring and maintenance program shall be made available to the TCEQ Executive Director or his designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, and corrective actions taken. Records of flange inspections are not required unless a leak is detected.
 - J. Fugitive emission monitoring required by 30 TAC § 115, an applicable New Source Performance Standard (NSPS), 40 CFR Part 60, or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61, may be used in lieu of Items F through I of this condition.
 - K. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, NSPS, or NESHAPS and does not constitute approval of alternative standards for these regulations.
13. Piping, Valves, Flanges, Pumps, and Compressors in the TEG regeneration system in VOC Service - 28MID

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 psia at 68° F, or (2) to piping and valves two inches nominal size and smaller, or (3) where the operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable ANSI, API, ASME, or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

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- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves, as defined by 30 TAC § 115, shall be identified in a list to be made available upon request.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. An approved gas analyzer shall conform to requirements listed in 40 CFR § 60.485(a)-(b).

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps and compressors shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

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All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. At the discretion of the TCEQ Executive Director or his designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.
- I. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- J. Percent of valves leaking used in paragraph I shall be determined using the following formula:

$$(V_l + V_s) \times 100/V_t = V_p$$

Where: V_l = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

V_s = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

V_t = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor valves.

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V_p = the percentage of leaking valves for the monitoring period.

- K. The results of the required fugitive instrument monitoring and maintenance program shall be made available to the TCEQ Executive Director or his designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of physical inspections are not required unless a leak is detected.
 - L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC § 115, an applicable NSPS, or an applicable NESHAPS and does not constitute approval of alternative standards for these regulations.
 - M. Pump and compressor seal monitoring - The leak definition for instrument monitoring of pump and compressor seals shall be 10,000 ppmv instead of the 500 ppmv leak definition given in Paragraph H of this condition. In addition, Special Condition No. 12G shall apply to these components instead of Special Condition No. 13G. **(3/01)**
14. Piping, Valves, Pumps, and Compressors in H₂S Service **(9/08)**
- A. Audio, olfactory, and visual checks for H₂S leaks within the operating area shall be made everyday during normal operations.
 - B. Immediately but no later than one hour upon detection of a leak, plant personnel shall take the following actions:
 - (1) Isolate the leak
 - (2) Commence repair or replacement of the leaking component
 - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request.

15. The holder of this permit shall install, calibrate, and maintain a continuous monitoring instrument to continuously monitor and record H₂S in the acid gas stream. This detector shall sample and record the H₂S concentration in the acid gas at least once every ten minutes. The monitors shall be zeroed and spanned weekly. The monitor shall be maintained and shall be verified to meet the performance specifications of the

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manufacturer. Records shall be maintained to demonstrate the proper operation and maintenance of the monitor.

CONTINUOUS MONITORING

16. The SRU Incinerator (EPN W-06) firebox exit temperature shall be maintained at not less than 955° F and exhaust oxygen concentration not less than 3 percent when combusting waste vapor.

The SRU Incinerator exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the incinerator. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.

Quality-assured (or valid) data must be generated when the thermal oxidizer is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(9/08)**

17. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of SO_2 from the SRU Incinerator (EPN W-06).
 - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, (40 CFR Part 60), Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division for requirements to be met.
 - B. The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, ' 5.2.3 and any CEMS

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downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.

The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception: a relative accuracy test audit (RATA) is **not** required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of ± 15 percent accuracy indicate that the CEMS is out of control.

- C. The monitoring data shall be reduced to an hourly average concentration at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of lb/hr at least once every week as follows:

The measured hourly average concentration from the CEMS shall be multiplied by the flow rate measured by incinerator exhaust stack flow monitor to determine the hourly emission rate.

- D. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- F. Quality-assured (or valid) data must be generated when the SRU is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data),

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repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the SRU operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager. **(9/08)**

EMISSIONS TESTING

18. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the SRU incinerator (EPN W-06) and the Boiler (EPN W-09). The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. **(11/06)**

A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director or the TCEQ Office of Compliance and Enforcement (OCE), Compliance Support Division must approve any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in B of this condition shall be submitted to the TCEQ Austin Office of Permitting, Remediation, and Registration, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for

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NSPS testing which must have EPA approval shall be submitted to the TCEQ OCE, Compliance Support Division.

- B. Air contaminants emitted from the SRU incinerator to be tested for include (but are not limited to) SO₂ and total reduced sulfur. Air contaminants emitted from the Boiler to be tested for include (but are not limited to) CO and NO_x.
- C. Sampling shall occur within 75 days after initial start-up of the facilities (initial sampling completed; additional testing approved in a letter from the TCEQ Lubbock Regional Office dated November 20, 1990) and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires EPA approval, and requests shall be submitted to the appropriate TCEQ Regional Office.
- D. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- E. Two copies of the final sampling report shall be forwarded to the TCEQ within 30 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Lubbock Regional Office.

One copy to the TCEQ OCE, Compliance Support Division.

- 19. The following requirements apply to capture systems for the SRU Incinerator (EPN W-06).
 - A. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - B. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - C. The control device shall not have a bypass.

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- D. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action. **(9/08)**
20. Emissions from sulfur storage shall be vented to the SRU incinerator.
21. At least once per year, the permit holder shall sample the vapor space of a tanker truck being loaded with liquid sulfur for H₂S using stain tubes. Records of each sample shall be kept.

RECORDKEEPING AND REPORTING

22. The holder of this permit shall keep daily records of all flow rates of gas processing streams. The H₂S content of the acid gas streams shall be recorded daily. **(9/08)**
23. Connections required by the Texas Railroad Commission to be threaded are exempt from the requirement to be welded or flanged under Special Conditions 12.E and 13.E. **(9/08)**
24. In place of gas testing or hydraulic testing as required by Special Conditions 12.E and 13.E, new or reworked connections may be tested using 100 % x-ray or other methods according to ASME B31.3 345.9 Alternate Leak Test.

Dated August 30, 2011

/EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 9649 and PSD-TX-683

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
W-01	CO ₂ Heater	NO _x	0.25	1.07
		CO	0.21	0.90
		SO ₂	0.10	0.10
		PM ₁₀	0.10	0.10
		VOC	0.10	0.10
W-02	Glycol Reboiler	NO _x	0.20	0.90
		CO	0.20	0.72
		SO ₂	0.10	0.10
		PM ₁₀	0.10	0.10
		VOC	0.10	0.10
W-03	Boiler 1	NO _x	3.84	16.80
		CO	4.51	19.80
		SO ₂	0.05	0.20
		PM ₁₀	0.41	1.80
		VOC	0.30	1.30
W-04	Boiler 2	NO _x	3.84	16.80
		CO	4.51	19.80
		SO ₂	0.05	0.20
		PM ₁₀	0.41	1.80
		VOC	0.30	1.30
W-05	SRU Heater	NO _x	0.11	0.50
		CO	0.10	0.40
		SO ₂	0.10	0.10
		PM ₁₀	0.10	0.10
		VOC	0.10	0.10

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
W-06	SRU Incinerator	NO _x	0.30	1.00
		CO	0.20	0.90
		SO ₂	132.50	126.44
		PM ₁₀	0.10	0.10
		VOC	0.10	0.10
		H ₂ S	1.41	3.30
W-07	Flare	NO _x	0.10	0.33
		CO	0.33	1.42
		SO ₂	3.04	5.87
		VOC	0.20	0.70
		H ₂ S	0.10	0.10
W-08	Flare (5)	NO _x	0.10	0.41
		CO	0.35	1.55
		SO ₂	0.01	0.04
		VOC	0.01	0.02
W-09	Boiler 3	NO _x	2.88	12.60
		CO	3.04	13.32
		SO ₂	0.10	0.40
		PM ₁₀	0.61	2.70
		VOC	0.44	1.94
W-10	Temporary Boiler (6)	NO _x	0.74	3.26
		CO	2.75	12.06
		SO ₂	0.07	0.30
		PM ₁₀	0.60	2.43
		VOC	0.40	1.80
Analyzers	Analyzer Vents	VOC	0.10	0.22
		H ₂ S	0.10	0.10

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
FU-CO2	Plant Fugitives (7)	VOC	5.77	25.25
		H ₂ S	0.26	1.11
FU-OTHER	Plant Fugitives-Other (7)	VOC	1.50	6.60
		H ₂ S	0.11	0.48
FU-DEMETH	Fugitive emissions from demethanizer (4) (7)	VOC	0.14	0.60
		H ₂ S	0.10	0.10
E-EMGEN	Emergency Generator (4)	NO _x	19.91	8.71
		CO	4.34	1.90
		SO ₂	1.70	0.74
		PM ₁₀	1.81	0.80
		VOC	0.60	0.30
E-EMWATER	Fire Water Pump (4)	NO _x	4.23	1.85
		CO	0.92	0.40
		SO ₂	0.30	0.12
		PM ₁₀	0.30	0.13
		VOC	0.34	0.15
H-220	Demethanizer Heater (4)	NO _x	0.30	1.12
		CO	0.21	0.94
		SO ₂	0.10	0.10
		PM ₁₀	0.10	0.10
		VOC	0.10	0.10
T-230A	Methanol Storage Tank	VOC	2.22	0.21
T-230B	Methanol Storage Tank	VOC	2.22	0.21
V-892	Diesel Storage Tank 1	VOC	0.10	0.10

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
T-EMGEN	Diesel Storage Tank 2	VOC	0.10	0.10
SU-1	Sulfur Loading	H ₂ S	0.01	0.01

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) NO_x - total oxides of nitrogen
CO - carbon monoxide
SO₂ - sulfur dioxide
PM₁₀ - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
H₂S - hydrogen sulfide
- (4) These facilities are authorized by Permit by Rule and are included for reference. **(11/06)**
- (5) Emissions authorized by this flare are pilot and purge gas only.
- (6) A temporary boiler with a heat input rating of up to 74.4 MM Btu/hr may be used on an as-needed basis. **(11/06)**
- (7) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (8) HAP emissions do not exceed 10 tpy of any one and 25 tpy of any combination of HAPs

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Date August 30, 2011